

SEDIMENT STORAGE:

The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Outfall Number	(3) Total Drainage Area (acres)	Disturbed Area (acres)	Required <sup>(1)</sup> Sediment Storage Volume (CY)	(2) Total Storage Volume Provided (CY)	Diversions	Ditch Checks				J-Hooks		Inlet Sediment Traps (Sd2-F)		Silt Fence		Filter Ring		Rock Filter Dam	
	No. of Acres Diverted			No. of Fabric Devices	No. of Rip Rap Devices	Total Volume (CY)	No. of Devices	Total Volume (CY)	No. of Devices	Total Volume (CY)	Linear Feet	Total Volume (CY)	No. of Devices	Total Volume (CY)	No. of Devices	Total Volume (CY)			
1	0.27	0.00	0.00	0.00	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.46	0.88	59.0	138.0	0.58	-	-	-	5	8	1	3	755	127	-	-	-	-	
3	4.32	1.14	258.6	327.0	0.46	-	-	-	6	9	3	9	1842	309	-	-	-	-	

- Notes:
- (1) The Required Sediment Storage Volume was calculated using the Total Drainage Area minus the total area being diverted from disturbed areas with the installation of diversions. Diversions will be installed before any earthwork begins.
- (2) See sediment basin notes
- (3) Total Drainage Areas listed in the sediment storage chart for Outfalls 1 & 2 are based on Stage Construction and differ from the final condition listed on the drainage area map.

In order to prevent runoff from bypassing inlet sediment traps, a temporary berm shall be installed on the downstream side of all inlet sediment traps that are not located in a low point or an excavated sump. Temporary berms, when necessary, shall be a minimum of 18" high and constructed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

Month	1-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36
Install Temporary Erosion Control Measures												
Maintenance of Temporary Erosion Control Measures												
Perform Construction Activities												
Establish Permanent Vegetation												
Remove Temporary Erosion Control Structures												

MONITORING GENERAL NOTES:

Representative sampling may be utilized on this project. The characteristics of the individual watersheds along the project corridor have been carefully evaluated and compared on the basis of drainage characteristics, watershed size, land disturbance and earth work. After evaluation of these items as presented in the project's drainage area maps, hydrology and hydraulic studies, construction plans and erosion sedimentation and pollution control plans, it has been determined that the increase in turbidity at the specified locations will be representative of the increase in turbidity for all waters leaving the site. Approved primary and alternate representative monitoring sites are identified in the table.

Monitoring site	Primary or Alternate Site	Location (Sta. and Side)	Name of Receiving water	Applicable construction stage for monitoring	Sampling Type (Outfall or Receiving Water)	Drainage Area (Sq. mi)	Total Project Size Area (Ac)	Warm or Cold water Stream	Appendix B NTU value (outfall Monitoring Only)	Allowable NTU Increase (For Receiving Water)	Location Description
1.	Primary	Broad Ave Sta. 22+33.23 - 24.75' LT	Flint River	ALL	Outfall	5,300	2.78	Warm	750	-	Outfall 3

The primary site specified should be used as the initial sampling location. The alternate sampling sites may be used if additional sampling is required and/or if the primary sampling site is no longer located within the active phase of construction.

MONITORING SAMPLING METHODS & PROCEDURES

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures. The Department will retain records in accordance with part IV.F of General Permit GAR 100002.

BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate commun

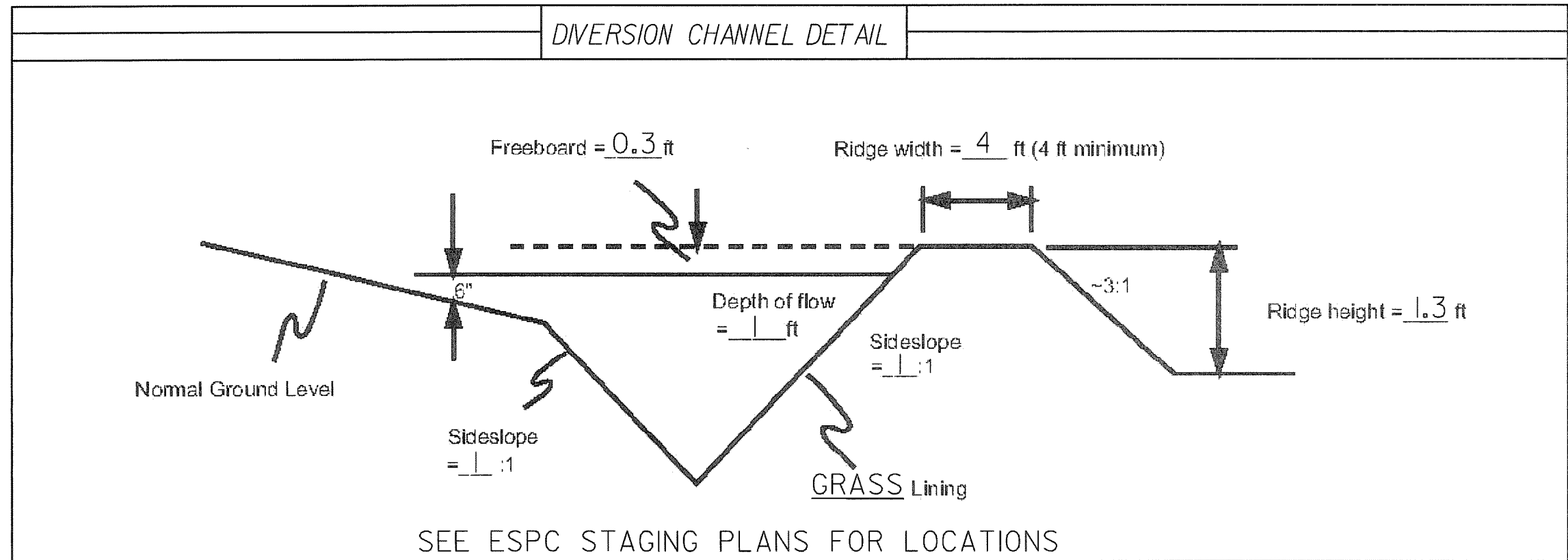
SEDIMENT BASINS:

Outfall 1:  
The total sediment storage volume provided in Outfall 1 is less than the required sediment storage volume. However, during construction activities Outfall 1 will remain paved or will be covered with backfill for the construction of the walls and GAB for the construction of the roadway eliminating exposed earth within this basin. During grading activities, where there will be exposed earth, the drainage area will be graded to drain into Drainage Area 2, which is designed to handle the additional storage requirements.

Outfall 2:  
The total sediment storage volume provided in Outfall 2 exceeds the required sediment storage. A sediment basin has not been used at this location because the installation of a sediment basin would cause impacts to environmentally sensitive areas located along both sides of the basin. Drainage through the basins disturbed area will be minimized through the use of diversions. The remaining drainage area will be protected with the use of BMPs and the required storage capacity will be provided.

Outfall 3:  
The total sediment storage volume provided in Outfall 3 exceeds the required sediment storage. A sediment basin has not been used at this location because the installation of a sediment basin would cause impacts to environmentally sensitive areas located along both sides of the basin. Drainage through the basins disturbed area will be minimized through the use of diversions or will remain paved or covered with backfill for the construction of the walls and GAB for the construction of the roadway eliminating exposed earth within this basin. The remaining drainage area will be protected with the use of BMPs and the required storage capacity will be provided.

Outfall 4:  
The total sediment storage volume provided in Outfall 4 exceeds the required sediment storage. A sediment basin has not been used at this location because the installation of a sediment basin would cause additional adverse impacts to adjacent properties. The drainage area will be protected with the use of BMPs and the required storage capacity will be provided.



STREAM BUFFER ENCROACHMENT

Stream Buffers are impacted by this project.

The contractor is not authorized to enter into stream buffers, except as described in the table below:

Name (name or number of feature)	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted (Yes/No)	Buffer Variance Required?
	Alignment	Begin Sta (Lt or Rt)	Ending Sta (Lt or Rt)			
Flint River	Broad Ave.	15+92.53	19+64.43	Warm	Yes	No
Allowable Buffer Impacts: Relocation of existing utilities, demolition of existing bridge and bents and construction of proposed bridge						

\* Warm water streams have a 25-foot minimum buffer as measured from the wretched vegetation. Cold Water streams have a 50-foot buffer as measured from the wretched vegetation.  
\*\* Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

PROPERTY AND EXISTING R/W LINE  
REQUIRED R/W LINE  
CONSTRUCTION LIMITS  
EASEMENT FOR CONSTR  
& MAINTENANCE OF SLOPES  
EASEMENT FOR CONSTR OF SLOPES  
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA  
END LIMIT OF ACCESS.....ELA  
LIMIT OF ACCESS  
R/W AND LIMIT OF ACCESS  
EXISTING R/W LINE

**Heath & Lineback Engineers**  
INCORPORATED  
2390 CANTON ROAD, BUILDING 200  
MARIETTA, GEORGIA 30066-5393

REVISION DATES		
04-12-12		

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY

ESPC GENERAL NOTES

BROAD AVENUE BRIDGE REPLACEMENT  
OVER THE FLINT RIVER  
DOUGHERTY COUNTY

DRAWING NO.  
51-003